

## ABSTRACT

There is provided a new inter-station transmission method capable of extending, as compared with a conventional method, a time to be allocated for a transmission path delay of an inter-station transmission path within a predetermined turnaround time, and increasing an inter-station transmission distance as much as possible. A radio base station (20) reproduces a clock synchronized with a BSU transmission clock DCLK, the BSU transmission clock DCLK being used when transmitting downlink transmission data from a communication control station (10). Based on the reproduced clock, the radio base station (20) processes the downlink transmission data. Since this clock synchronization eliminates a necessity of data format conversion between the communication control station (10) and the radio base station (20), a buffer such as a FIFO for accumulating transmission data in preparation for the conversion is no longer necessary. Consequently, a delay time caused by the buffer in a conventional process is eliminated. This makes it possible to reduce the turnaround time of a mobile communication system. When the new inter-station transmission method is applied to dedicated short-range communications, in which the turnaround time is fixed, a physical distance between the communication control station and the radio base station can be increased by a distance that corresponds to the eliminated delay time.